



NEW ABSTRACT

An encoder includes a segmentation unit for segmenting an audio or speech signal into at least one segment and a calculation unit for calculating sinusoidal code data in the form of frequency and amplitude data of a given extension from the segment such that the extension approximates the segment for a given criterion. The calculation of the sinusoidal code data θ_k^i , d_j^i and e_j^i for the segment $x(n)$ is carried out according to the following extension \hat{x} :

$$\hat{x} = \sum_{i=1}^L \sum_{j=0}^{J-1} [d_j^i f_j(n) \cos(\Theta^i(n)) + e_j^i f_j(n) \sin(\Theta^i(n))].$$